



Planning, Development and Transportation

Transportation Planning
305 Chestnut Street
PO Box 1810
Wilmington, NC 28402-1810

910 341-3258
910 341-7801 fax
www.wilmingtonnc.gov
Dial 711 TTY/Voice

DATE: 11.20.2019
TO: ProTrak
FROM: Mitesh Baxi
Traffic Engineering

■ **MASONBORO VILLAGE [Subdivision Plan Review]**

↻ Initial Review Note ↻

All comments are based on adopted policy documents, specific City of Wilmington Land Development Code (CofW LDC) and City of Wilmington Technical Standards and Specifications Manual (CofWTSSM) requirements in effect at the time of this review. These have been noted after the comment as appropriate for your ease in further research.

The City Engineer may administratively approve dimensional variance requests per LDC Sec. 18-348. If the Applicant feels further interpretation is in order, please contact Transportation Planning directly to discuss in additional detail. Please apply for all administrative variances in writing, an email is acceptable or this may be included on the plan set. Please see Sec. 18-348 of the Land Development Code for the information required to process a variance request.



BASE INFORMATION:

- Revise all sheets to accurately illustrate the existing conditions on and surrounding this parcel. Show all adjacent traffic signs, lane configurations, traffic control devices and pavement markings on the site inventory plan. Please refer to the Technical Standards and Specifications Manual (link is below) Ch. VII C.1.a.2.for specific information and distance requirements. Contact Traffic Engineering at 341-7888 if you need assistance locating these elements.
<https://www.wilmingtonnc.gov/home/showdocument?id=1910>
- All private streets shall be designed and constructed to meet or exceed the public street standards as specified by the [city's] Technical Standards and Specifications Manual. [Sec.18-378 (d) CofW LDC]
- Street lights must be installed on all the proposed ROWs in accordance with City’s street lighting policy. Since the streets are proposed to be private ROW, you are not required to get the approval for the street lighting plan from City. Please coordinate with Duke Energy for the installation.
- Provide a signage and pavement marking plan showing all proposed traffic control signs, street name signs, and related pavement markings locations and types.
<https://www.wilmingtonnc.gov/home/showdocument?id=3940>

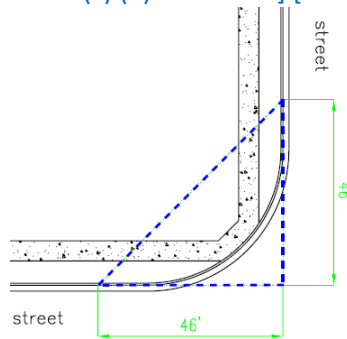
TECHNICAL STANDARDS – NEW ROADS:

1. Please label the street names.
2. The cul-de-sac off Road C exceeds the maximum length of 500’. [Chapter VII, Sec.B (2) CofWTSSM] Coordinate with Engineering for a variance request for all applicable streets.
3. The intersections of proposed ROW at multiple locations are closer than the 200’/400’ minimum distance per the City’s technical standards. [Table 2, 7-5 CofW Tech Stds] Coordinate with Engineering for a variance request for all applicable streets.
4. A vertical profile for alley ROW is not in accordance with [CofW SD 3-01.9]. Coordinate with Engineering for a variance request.

5. A vertical profile for typical minor street with valley curb ROW is not in accordance with [CofW SD 3-01.8]. Coordinate with Engineering for a variance request.
6. Install wheelchair ramp at all the applicable corner of the proposed streets per NCDOT and/or City standards. Connect sidewalk with ramp.
7. The minimum horizontal centerline radius is 100' for local roads and 200' for collector streets. Coordinate with Engineering for a variance request for all applicable streets.
8. The minimum street corner radii is 35'. [Table 2, 7-5 CofW Tech Stds]. Coordinate with Engineering for a variance request.
9. The minimum Right-of-way diameter at end of cul-de-sac is 100' [Table 2, 7-5 CofW Tech Stds]. Applicable for Road C and H. Coordinate with Engineering for a variance request.
10. The minimum diameter of pavement edge at end of cul-se-sac is 80' [Table 2, 7-5 CofW Tech Stds]. Applicable for Road C and H. Coordinate with Engineering for a variance request.
11. Provide a turning movement analysis of a largest vehicle expected to access these streets and cul-de-sacs.
12. A backing stub shall be provided for an aisle behind Lots 86, 87, 88.

TECHNICAL STANDARDS – ACCESS (sidewalk and sight distance):

13. Provide sidewalk detail SD 3-10 on the plan. [Sec. 18-529(b)(2) CofW LDC]
14. Provide curbing detail SD 3-11 on the plan. [Sec. 18-529(b)(2) CofW LDC]
15. Show and apply the City's 46'x46' sight distance triangle at each street corner intersection on the site plan and landscaping plan. [Sec.18-529(c) (3) CofW LDC] [Sec. 18-812 CofW LDC].



SIGHT DISTANCE TRIANGLE FOR ANY STREET INTERSECTIONS WITH SAID THOROUGHFARES

This section of Masonboro Loop Rd is a major thoroughfare [Chap VII (C) (2) (a) of CofW Tech Stds]. The required triangular sight distance for any street intersections with said thoroughfares shall be provided in compliance with the AASHTO sight distance standards. [Sec.18-556 CofW LDC]

ROUNDBABOUT

Roundabout design should be prepared by an engineer experienced with such and should consider geometric controls such as:

- Entry angle and offset to center as appropriate
- Entry, Circulating and exit speed-radius relationships
- Inscribed diameter consistent with design vehicle (Provide autoturn analysis of the largest vehicle expected to access this roundabout).
- Truck apron consistent with design vehicle. Dimension the apron width.
- Consideration for Splitter Island that accommodate pedestrian refuge as room allows.
- Approach and departure sight distances.
- Sight distances across the center island
- Appropriate signing and markings

This list is not inclusive and submittals should provide reasoning used for each parameter.

GENERAL NOTES TO ADD TO THE PLAN:

- A. Street trees must be located a minimum of 15 feet from street lights. [\[CofW SD 15-17\]](#)
- B. It shall be the responsibility of the subdivider to erect official street name signs at all intersections associated with the subdivision in accordance with the Technical Standards and Specifications Manual. The subdivider may acquire and erect official street name signs or may choose to contract with the city to install the street signs and the subdivider shall pay the cost of such installation. Contact Traffic Engineering at 341-7888 to discuss installation of traffic and street name signs. Proposed street names must be approved prior to installation of street name signs.
- C. Contact 811 prior to contacting City of Wilmington, Traffic Engineering regarding the utilities in ROW.

MISCELLANEOUS:

- ❖ Contact Traffic Engineering at (910) 341-7888 to discuss street lighting options.
- ❖ We will reserve comments other technical issues until a full construction drawing is submitted.

Please let me know if you have any questions or if I can be of further assistance as this development moves through the review process.